

Notice of Allowability

Application No.

09/980,910

Examiner

Lois Zheng

Applicant(s)

WIETZORECK ET AL.

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 15 September 2006.
2. ☒ The allowed claim(s) is/are 84-118.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Crawford on 21 November 2006.

The application has been amended as follows:

84. (currently amended) A method comprising applying a phosphate coating to a metallic coil by wetting a surface of the metallic coil with an aqueous, acidic phosphating solution and drying the phosphating solution on the coated surface of the coil to form a crystalline-coating on said metallic coil, wherein the phosphating solution comprises 26 to 60 g/l of zinc ions; at least 5 to 40 g/l of manganese ions; **and** 50 to 300 g/l of phosphate ions, calculated as P_2O_5 and 25 to 120 g/l of peroxide calculated as H_2O_2 , **wherein** to form a coating having a coating weight in the range of from 0.2 to 5 g/m².

85. (currently amended) A method comprising applying a phosphate coating to a metallic coil by wetting a surface coil metallic with an aqueous, acidic phosphating solution and drying of the phosphating solution to form a crystalline coating on the surface of the coil, wherein the phosphating solution comprises 10 to 60 g/l of zinc ions; 0.5 to 40 g/l of manganese ions; 50 to 300 g/l of phosphate ions, calculated as P_2O_5 ; and ~~one~~ 25 to 120 g/l of peroxide ions, calculated as

~~H₂O₂ or 0.5 to 50 g/l of at least one of a polymer, a copolymer or a cross polymer~~, to form a coating having a coating weight of from 0.2 to 5 g/m².

110. (currently amended) A method comprising applying a phosphate coating to a metallic surface by wetting the surface with an aqueous, acidic phosphating solution and drying the phosphating solution on the coated surface to form a coating on said metallic surface, wherein the phosphating solution comprises 26 to 60 g/l of zinc ions; at least 5 to 40 g/l of manganese ions; ~~and 50 to 300 g/l of phosphate ions, calculated as P₂O₅, to form a coating having a coating weight of from 0.2 to 5 g/m² and 25 to 120 g/l of peroxide ions, calculated as H₂O₂.~~

111. (currently amended) A method comprising applying a phosphate coating to a metallic surface by wetting the metallic surface with an aqueous, acidic phosphating solution and drying of the phosphating solution to form a coating on the metallic surface, wherein the pbosphating solution comprises 10 to 60 g/l of zinc ions; at least 5 to 40 g/l of manganese ions; 50 to 300 g/l of phosphate ions, calculated as P₂O₅; and ~~one of~~ 25 to 120 g/l of peroxide ions, calculated as H₂O₂ ~~or 0.5 to 50 g/l of at least one of a polymer, a copolymer or a cross polymer~~, to form a coating having a coating weight of from 0.2 to 5g/m².

115. (currently amended) A method comprising applying a phosphate coating to a metalic surface by wetting the surface with an aqueous, acidic phosphating solution and drying the phosphating solution on the coated surface to form a coating on said metallic surface, wherein the phosphating solution comprises 26 to 60 g/l of zinc ions; at least 5 to 40 g/l of manganese ions; ~~and 50 to 300 g/l of~~

Art Unit: 1742

phosphate ions, calculated as P_2O_5 , ~~wherein a coating having a coating weight of form 0.2 to 5 g/m² is formed~~ and 25 to 120 g/l of peroxide ions, calculated as H_2O_2 , and contacting the resultant coated metallic surface with a second phosphating solution.

116. (currently amended) A method comprising applying a phosphate coating to a metallic surface by wetting the metallic surface with an aqueous, acidic phosphating solution and drying of the phosphating solution to form a coating on the metallic surface, wherein the phosphating solution comprises 10 to 60 g/l of zinc ions; at least 5 to 40 g/l of manganese ions; 50 to 300 g/l of phosphate ions, calculated as P_2O_5 ; and ~~one of~~ 25 to 120 g/l of peroxide ions, calculated as H_2O_2 ~~or 0.5 to 50 g/l of at least one of a polymer, a copolymer or a cross-polymer,~~ and contacting the resultant coated metallic surface with a second phosphating solution, wherein a coating having a coating weight of from 0.2 to 5 g/m².

At the beginning of the specification, please insert the following:

This application is 371 national stage entry of PCT/EP01/02498 filed 6 March 2001.

Examiner's Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The prior art of record, does not teach or fairly suggest, either alone or in combination a method comprising applying a phosphate coating to a metallic coil by wetting surface of the metallic coil with an aqueous acidic phosphating solution and drying the phosphating solution to form a crystalline-coating on the metallic coil, wherein

Art Unit: 1742

the phosphating solution comprises 10-60g/l of Zn ions, at least 5 to 40g/l of Mn ions, 50-300g/l of phosphate ions calculated as P_2O_5 and 25-120 g/l of peroxide calculated as H_2O_2 , to form a coating having a coating weight of 0.2-5g/m².

Furthermore, prior art teaches that a non-uniform film can be formed if hydrogen peroxide level is over 10g/l and the coating is economically disadvantageous as evidenced by Jo et al. US 5,221,370(col. 3 lines 7-20), Endo et al. US 5,232,523(col. 4 lines 37-51) and Shirahata et al. US 5,780,122(col. 5 lines 51-64).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LLZ

ROY KING 
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TECHNOLOGY CENTER 1742